

WHAT IS CLAIMED IS:

1. A tool for flanging coated brake pipes of a motor vehicle, the tool comprising:

a basic body with an approximately semicylindrical receiving groove forming a clamping channel for clampingly holding the brake pipe;

a clamping jaw with an approximately semicylindrical clamping groove;

5 a pressing spindle arranged at said basic body and extending coaxially with the clamping channel and adjustable in relation to the clamping channel;

a flanging pressure piece provided at a channel-side end of said pressing spindle forming the flanged head of the brake pipe, wherein the diameter of the clamping channel at right angles to the parting plane of the basic body and the clamping jaw is smaller over at least approximately its
10 entire length than the pipe diameter of the brake pipe, and surfaces of the receiving groove and of the clamping groove which form the clamping channel have an arithmetic average peak-to-valley height Ra of 5.0 to 10.0.

2. A tool for flanging coated brake pipes of a motor vehicle, the tool comprising:

a basic body with an approximately semicylindrical receiving groove forming a clamping channel for clampingly holding the brake pipe;

a clamping jaw with an approximately semicylindrical clamping groove;

5 a pressing spindle arranged at said basic body and extending coaxially with the clamping channel and adjustable in relation to the clamping channel;

a flanging pressure piece provided at a channel-side end of said pressing spindle forming

the flanged head of the brake pipe, wherein the diameter of the clamping channel at right angles to the parting plane of the basic body and the clamping jaw is smaller over at least approximately its entire length than the pipe diameter of the brake pipe and the surfaces of the receiving groove and of the clamping groove forming the clamping channel are provided with depressions located one after another in a circumferential direction and formed by said cylinder sections of said receiving groove and of said clamping groove, said cylinder sections following each other in a circumferential direction and alternatingly have equal or different radii of curvature and said radial depressions have a maximum depth of 0.1 mm.

3. A tool in accordance with claim 2, wherein said radial depressions are located one after another in the circumferential direction and are formed by said cylinder sections to provide a wave profile.

4. A tool for flanging coated brake pipes of a motor vehicle, the tool comprising:
a basic body with an approximately semicylindrical receiving groove forming a clamping channel for clampingly holding the brake pipe;

a clamping jaw with an approximately semicylindrical clamping groove;
a pressing spindle arranged at said basic body and extending coaxially with the clamping channel and adjustable in relation to the clamping channel;

a flanging pressure piece provided at a channel-side end of said pressing spindle forming the flanged head of the brake pipe, wherein the diameter of the clamping channel at right angles to the parting plane of the basic body and the clamping jaw is smaller over at least approximately its

10 entire length than the pipe diameter of the brake pipe and the surfaces of said receiving groove
and of said clamping groove forming the clamping channel are provided with depressions located
axially one after another, and are formed by groove sections of different groove depth, which
follow each other axially and said groove depth of said groove sections used for the clamping
holding is constant and corresponds to the external diameter of the coated brake pipe to be
15 flanged.

5. A tool in accordance with claim 4, wherein two different groove depths of said groove sections are provided, and said groove sections of a smaller depth of the receiving groove are associated in pairs with said groove sections of smaller depth of the clamping groove.

6. A tool in accordance with claim 5, wherein the difference of the sum of the groove depths of said receiving groove and of said clamping groove is in a range of 0.025 mm to 0.1 mm and preferably equals 0.07 mm.

7. A tool in accordance with claim 4, wherein said groove sections have an axial length of about 4 mm to 11 mm.

8. A tool in accordance with claim 1, wherein a surface roughness and radial and axial depressions are provided in different combinations.

9. A tool in accordance with claim 2, wherein a sum of the groove depths of said

receiving groove and of said clamping groove is up to 1.9% smaller than the external diameter of the brake pipe.

10. A tool in accordance with claim 1, wherein in an area of a parting plane between said basic body and said clamping jaw said receiving groove and said clamping groove has a width that corresponds to an external diameter of the brake pipe.

11. A tool in accordance with claim 1, wherein limiting edges of said receiving groove and said clamping groove to a corresponding parting plane between said basic body and said clamping jaw are rounded and have a radius of curvature of 0.1 mm to 0.4 mm.

12. A tool in accordance with claim 1, wherein in an area of said clamping channel end directed toward said pressing spindle, said clamping channel has a round cross section having a diameter corresponding approximately to 93% to 98% of the external diameter of the brake pipe over an axial length of 4 mm to 6 mm.

13. A tool in accordance with claim 11, wherein limiting edges of said receiving groove and of said clamping groove have sharp edges to the respective parting plane belonging to said receiving groove and of said clamping groove in an area of said cylindrical sections.

14. A tool in accordance with claim 1, wherein said clamping channel has a hollow toward said pressing spindle with a depth of up to 1 mm, whose conical surface extends at a angle

of 55° to 60° to the central longitudinal axis of the clamping channel, and limiting edges of the respective hollows have sharp edges toward the respective parting planes.

15. A tool in accordance with claim 1, wherein at an end of said clamping channel located opposite the pressing spindle said clamping channel has an outlet section with a length of up to 3 mm in the form of a hollow extending at an outlet angle of 10° to 20° to the central longitudinal axis of the clamping channel.

16. A tool in accordance with claim 1, wherein a front side directed toward the pressing spindle of said clamping jaw has a swing wall pivotable from a neutral position into an intermediate space between said clamping groove and said pressing spindle for positioning the coated brake pipe in said clamping groove and forms a stop for the brake pipe in this pivoted-in position.

17. A tool in accordance with claim 1, wherein said receiving groove and said clamping groove have the same bottom depth.

18. A tool in accordance with claim 1, wherein a clamping channel is formed from said receiving groove and said clamping groove and has a clamping length of 6.5 cm to 10 cm for receiving the coated brake pipe.

19. A tool in accordance with claim 1, further comprising a clamping web is removably

fastened to the basic body.

20. A tool in accordance with claim 19, further comprising a handle extending at right angles to said clamping channel and at right angles to said clamping web and removably fastened to said clamping web.